



What is claimed is:

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A heat exchanging fin,

comprising:

a metallic plate section having a plurality of tube holes;

a plurality of collars each of which is extended from an edge of each tube hole; and

a plurality of flares each of which is formed at a front end of each collar,

wherein each flare includes a plurality of radially extended sections, which are radially outwardly extended from the front end of each collar, and separation between said metallic plate section and each radially extended section is fixed.

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2. The heat exchanging fin according to claim 1,
wherein a shape of an outer edge of each flare is
formed into a polygonal shape.
3. The heat exchanging fin according to claim 2,
wherein a shape of the outer edge of each flare is
formed into a triangle or a tetragon.
4. The heat exchanging fin according to claim 1,
wherein the radially extended sections of each flare
are provided to locate their apexes with regular
separations in the circumferential direction.

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5. The heat exchanging fin according to claim 4, wherein a shape of an outer edge of each flare is formed into a regular polygonal shape.
6. The heat exchanging fin according to claim 5, wherein a shape of the outer edge of each flare is formed into a regular triangle or a regular tetragon.
7. The heat exchanging fin according to claim 1, wherein each flare includes a plurality of narrow sections, which are radially outwardly extended from the front end of each collar and their width is narrower than that of the radially extended sections.
8. The heat exchanging fin according to claim 7, wherein the radially extended sections of each flare are provided with regular separations in the circumferential direction.
9. The heat exchanging fin according to claim 8, wherein a shape of an outer edge of each flare is formed into a regular polygonal shape.
10. The heat exchanging fin according to claim 9, wherein a shape of the outer edge of each flare is formed into a regular triangle or a regular tetragon.
11. A method of manufacturing a heat exchanging fin including: a metallic plate section having a plurality of

tube holes; a plurality of collars each of which is extended from an edge of each tube hole; a plurality of flares having prescribed height, each flare being formed at a front end of each collar,

comprising the steps of:

forming a cylindrical section, in which higher sections and lower sections are alternately formed at a front end, along the edge of each tube hole; and

forming the flare of each collar by radially outwardly bending the higher sections of said cylindrical section.

12. The method of manufacturing a heat exchanging fin according to claim 11,

wherein said cylindrical section having the higher sections and the lower sections is formed by the steps of:

forming a projected section, which is formed into a columnar or a truncated cone shape, in said metallic plate section by drawing said metallic plate section;

boring a base hole, which is formed into an elliptic or a polygonal shape, in said projected section; and

burring said base hole so as to form said cylindrical section, in which at least two higher sections are formed at the front end, along the edge of the tube hole.

13. The method of manufacturing a heat exchanging fin

according to claim 12,

wherein the base hole is formed into a triangle or a tetragon.

14. The method of manufacturing a heat exchanging fin according to claim 12,

wherein the higher sections are provided at the front end of said cylindrical section with regular separations in the circumferential direction.

15. The method of manufacturing a heat exchanging fin according to claim 12,

wherein the base hole is formed into a regular triangle or a regular tetragon.

16. The method of manufacturing a heat exchanging fin according to claim 11,

wherein said cylindrical section having the higher sections and the lower sections is formed by the steps of:

boring a base hole, which is formed into an elliptic or a polygonal shape, in said metallic plate section;

burring said base hole; and

drawing a projected part, which is projected from an edge of the burred base hole, so as to form said cylindrical section, in which at least two higher sections are formed at the front end, along the edge of the tube hole.

17. The method of manufacturing a heat exchanging fin according to claim 16,

wherein the base hole is formed into a triangle or a tetragon.

18. The method of manufacturing a heat exchanging fin according to claim 16,

wherein the higher sections are provided at the front end of said cylindrical section with regular separations in the circumferential direction.

19. The method of manufacturing a heat exchanging fin according to claim 16,

wherein the base hole is formed into a regular triangle or a regular tetragon.

20. The method of manufacturing a heat exchanging fin according to claim 11,

wherein said flare includes a plurality of radially extended sections, which are radially outwardly extended from the front end of said collar, and a plurality of narrow sections, which are radially outwardly extended from the front end thereof and whose width is narrower than that of said radially extended sections, and

wherein said flare is formed by radially outwardly bending the higher sections of said cylindrical section.